

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 Claim 1 (original): An information acquisition device
2 which acquires digital information functioning by
3 executing a control program stored in program memory,
4 comprising:
5 a first transmission unit having directivity and
6 transmitting by wireless an information request signal to
7 be transmitted in a direction of the directivity;
8 an information addition unit adding at least one
9 piece of address information to the information request
10 signal to be transmitted;
11 a reception unit receiving a radio signal
12 transmitted by wireless in response to the information
13 request signal transmitted by the first transmission
14 unit, and acquiring information contained in the signal;
15 an information storage unit which is built in the
16 information acquisition device or attached to the device
17 as removable from the device, and can store all or a part
18 of information acquired by the reception unit; and
19 an operation unit issuing an instruction to start an
20 information requesting operation, wherein
21 the reception unit has no directivity or has broader
22 directivity than the first transmission unit.

1 Claim 2 (original): The device according to claim 1,
2 wherein
3 the first transmission unit transmits by wireless a
4 signal using an electromagnetic wave including light and
5 a sound wave including ultrasonic.

1 Claim 3 (original): The device according to claim 2,
2 wherein
3 an address added by the information addition unit to
4 an information request signal is an own address as an
5 address of the reception unit of the information
6 acquisition device.

1 Claim 4 (original): The device according to claim 3,
2 wherein
3 the address added by the information addition unit
4 to an information request signal includes an address
5 different from the address of the reception unit of the
6 information acquisition device.

1 Claim 5 (original): The device according to claim 3,
2 further comprising
3 an information presentation unit presenting all or a
4 part of information stored in the information storage
5 unit or information acquired by the reception unit.

1 Claim 6 (original): The device according to claim 5,
2 further comprising
3 an information transmission unit externally
4 transmitting information stored in the information
5 storage unit and information acquired by the reception
6 unit.

1 Claim 7 (original): The device according to claim 6,
2 further comprising
3 a selection unit selecting the information stored in
4 the information storage unit, wherein

5 the information transmission unit externally
6 transmits the information selected by the selection unit.

1 Claim 8 (original): The device according to claim 6,
2 wherein
3 the information transmission unit transmits
4 information to an address indicating a predetermined
5 destination.

1 Claim 9 (original): The device according to claim 5,
2 further comprising
3 a setting unit setting information relating to a
4 type of information received and acquired by the
5 reception unit, wherein
6 the information addition unit further adds
7 information relating to a type of information set by the
8 setting unit to the signal to be transmitted.

1 Claim 10 (original): The device according to claim 9,
2 further comprising
3 an information screen unit screening the information
4 received by the reception unit, wherein:
5 information to be acquired is screened by the
6 information screen unit from the information received by
7 the reception unit, and the screened information is
8 stored in the information storage unit.

1 Claim 11 (original): The device according to claim 10,
2 wherein
3 screening standards of the information screened by
4 the information screen unit designate a type of
5 information set by the setting unit, and only the

6 information of the type set by the setting unit is stored
7 in the information storage unit.

1 Claim 12 (original): The device according to claim 9,
2 wherein
3 the information relating to the type of
4 identification relates to at least one of a size of
5 information, a type of information, a style of
6 information, a file format of information, a content of
7 information, and a field of information.

1 Claim 13 (original): The device according to claim 9,
2 wherein
3 the information relating to a type of information
4 refers to information indicating a same target and a
5 different type of information capacity.

1 Claim 14 (original): The device according to claim 13,
2 wherein
3 the information relating to a type of information
4 includes information relating to at least one type of
5 common information, summary information obtained by
6 summarizing the common information, and the address
7 information in a network containing information.

1 Claim 15 (original): The device according to claim 5,
2 further comprising:
3 a server address extraction unit extracting a server
4 address designating an information providing source
5 contained in the information acquired by the reception
6 unit; and

7 a second transmission unit transmitting a signal in
8 a style different from a style of the first transmission
9 unit.

1 Claim 16 (original): The device according to claim 15,
2 wherein
3 the second transmission unit transmits by wireless a
4 signal using an electromagnetic wave including light and
5 a sound wave including ultrasonic, and the signal
6 transmitted by wireless from the second transmission unit
7 has no directivity or has broader directivity than the
8 signal transmitted by the first transmission unit.

1 Claim 17 (original): The device according to claim 16,
2 wherein
3 when the information received by the reception unit
4 is address information in a network in which the
5 information exists, the second transmission unit
6 transmits an information request signal to the server
7 address extracted by the server address extraction unit.

1 Claim 18 (original): The device according to claim 16,
2 further comprising:
3 a selection unit selecting at least an information
4 item from the information presented by the information
5 presentation unit; and
6 an ID information addition unit adding information
7 ID designating information corresponding to the
8 information item selected by the selection unit to the
9 signal to be transmitted, wherein
10 the first transmission unit or the second
11 transmission unit transmits the signal to be transmitted.

1 Claim 19 (original): The device according to claim 5,
2 further comprising
3 a warning unit giving a warning when the information
4 acquired by the reception unit is incomplete or when it
5 is determined that information cannot be completely
6 acquired.

1 Claim 20 (original): The device according to claim 16,
2 wherein
3 the first transmission unit or the second
4 transmission unit retransmits the signal to be
5 transmitted when the information acquired by the
6 reception unit is incomplete or when it is determined
7 that information cannot be completely acquired.

1 Claim 21 (original): The device according to claim 19,
2 wherein
3 the warning unit gives a warning when a size of the
4 information acquired by the reception unit exceeds a
5 predetermined size or a free storage capacity of the
6 information storage unit.

1 Claim 22 (original): The device according to claim 19,
2 wherein
3 the warning unit gives a warning when the
4 information received and acquired by the reception unit
5 relates to a size of continually transmitted information,
6 and the size of the information exceeds a predetermined
7 size or a free storage capacity of the information
8 storage unit.

1 Claim 23 (original): The device according to claim 20,
2 wherein
3 when the size of the information acquired by the
4 reception unit exceeds a predetermined size or a free
5 storage capacity of the information storage unit, the
6 information is automatically changed to the information
7 relating to a type of information of a smaller size, the
8 information addition unit adds the information relating
9 to the type of information to the signal to be
10 transmitted, and the first transmission unit or the
11 second transmission unit retransmits the added signal to
12 be transmitted.

1 Claim 24 (original): The device according to claim 5,
2 further comprising
3 an information size setting unit setting a maximum
4 value of a size of information that can be received and
5 acquired by the reception unit, wherein
6 the information addition unit further adds
7 information relating to the maximum value of the size of
8 the information that can be acquired and is set by the
9 information size setting unit to the signal to be
10 transmitted.

1 Claim 25 (original): The device according to claim 24,
2 wherein
3 the information size setting unit automatically sets
4 the maximum value of the size of the information that can
5 be acquired based on the free storage capacity of the
6 information storage unit.

1 Claim 26 (original): The device according to claim 5,
2 further comprising
3 a user information storage unit storing information
4 relating to a user of the information acquisition device,
5 wherein
6 the information addition unit further adds the
7 information relating to the user and stored in the user
8 information storage unit to the signal to be transmitted.

1 Claim 27 (original): The device according to claim 5,
2 further comprising
3 an equipment information storage unit storing
4 equipment information about the information acquisition
5 device, wherein
6 the information addition unit further adds the
7 equipment information about the information acquisition
8 device stored in the equipment information storage unit
9 to the signal to be transmitted.

1 Claim 28 (original): The device according to claim 27,
2 wherein
3 the equipment information contains at least one or
4 more of a maker name of the information acquisition
5 device, a model number, a product serial number, and
6 version information about firmware.

1 Claim 29 (original): The device according to claim 5,
2 further comprising:
3 an information acquisition history storage unit
4 storing information designation information designating
5 the information received by the reception unit; and

6 an acquired information determination unit
7 determining whether or not information newly received by
8 the reception unit is acquired according to the
9 information designation information about the newly
10 received information, wherein
11 the information storage unit stores information
12 determined by the acquired information determination unit
13 that the information has not been acquired in the
14 information received by the reception unit.

1 Claim 30 (original): The device according to claim 29,
2 wherein
3 the information designation information stored in
4 the information acquisition history storage unit is
5 information containing at least one of an address of a
6 device which transmits the signal received by the
7 reception unit and the information ID assigned to the
8 information received by the reception unit.

1 Claim 31 (original): The device according to claim 5,
2 further comprising
3 a detection unit detecting that there is an
4 information providing device capable of providing
5 information for the information acquisition device in the
6 direction of the directivity.

1 Claim 32 (original): The device according to claim 31,
2 wherein:
3 the detection unit further comprises:
4 an issued signal reception unit receiving an issued
5 signal from the information providing device; and

6 a notification unit notifying that there is the
7 information providing device detected when the issued
8 signal is received by the issued signal reception unit.

1 Claim 33 (original): The device according to claim 31,
2 wherein
3 when the detection unit does not detect presence of
4 the information providing device, an information
5 acquiring operation is not performed.

1 Claim 34 (original): The device according to claim 5,
2 further comprising
3 a program update unit extracting a control program,
4 and updating all or a part of the control program stored
5 in the program memory to be updated based on the control
6 program when the control program of the information
7 acquisition device is contained in the signal received by
8 the reception unit.

1 Claim 35 (original): The device according to claim 34,
2 further comprising:
3 an unreasonable program check unit detecting whether
4 or not an unreasonable program is contained in the
5 information acquired by the reception unit;
6 an unreasonable program warning unit giving a
7 warning when it is detected by the unreasonable program
8 check unit that an unreasonable program is contained in
9 the information acquired by the reception unit; and
10 an unreasonable program deletion unit deleting
11 acquired information when it is detected by the
12 unreasonable program check unit that an unreasonable

13 program is contained in the information acquired by the
14 reception unit.

1 Claim 36 (original): The device according to claim 5,
2 further comprising
3 an encryption unit encrypting all or a part of the
4 information added by the information addition unit to the
5 signal to be transmitted using an encryption key
6 contained in the information received and acquired by the
7 reception unit.

1 Claim 37 (original): The device according to claim 36,
2 wherein
3 the information addition unit further adds the
4 encryption key request information to the signal to be
5 transmitted.

1 Claim 38 (original): The device according to claim 5,
2 further comprising:
3 an encryption key generation unit generating an
4 encryption key and a decryption key; and
5 a decryption unit decrypting encrypted information
6 contained in the signal received by the reception unit
7 using the decryption key, wherein
8 the information addition unit adds an encryption key
9 generated by the encryption key information generation
10 unit to the signal to be transmitted.

1 Claim 39 (original): The device according to claim 5,
2 wherein

3 the reception unit further comprises a communication unit
4 using a public network and receiving, regenerating, and
5 communicating common sound through the public network .

1 Claim 40 (original): The device according to claim 5,
2 further comprising
3 an image capturing unit obtaining image data by
4 capturing a subject image in a same direction as the
5 directivity direction of the signal transmitted by the
6 first transmission unit, wherein:
7 the information storage unit stores the image data
8 captured by the image capturing unit in addition to the
9 information acquired by the reception unit; and
10 the information presentation unit presents all or a
11 part of the information or image data stored in the
12 information storage unit, the information acquired by the
13 reception unit, or the image data captured by the image
14 capturing unit.

1 Claim 41 (original): The device according to claim 40,
2 further comprising:
3 a mode setting unit setting at least one of a mode
4 of acquiring only information, a mode of acquiring only
5 an image, and a mode of acquiring both information and an
6 image; and
7 a mode switch unit switching a mode set by the mode
8 setting unit.

1 Claim 42 (original): The device according to claim 40,
2 further comprising
3 an information transmission unit externally
4 transmitting the information or image data stored in the

5 information storage unit, the information acquired by the
6 reception unit, or the image data captured by the image
7 capturing unit.

1 Claim 43 (original): The device according to claim 42,
2 further comprising
3 a selection unit selecting the information or the
4 image data stored in the information storage unit,
5 wherein
6 the information transmission unit externally
7 transmits the information or the image data selected by
8 the selection unit.

1 Claim 44 (original): The device according to claim 43,
2 wherein
3 the information transmission unit transmits
4 information to an address indicating a predetermined
5 destination.

1 Claim 45 (original): The device according to claim 40,
2 further comprising
3 a setting unit setting information relating to a
4 type of information received and acquired by the
5 reception unit, wherein
6 the information addition unit further adds
7 information relating to a type of information set by the
8 setting unit to the signal to be transmitted.

1 Claim 46 (original): The device according to claim 45,
2 further comprising
3 an information screen unit screening the information
4 received by the reception unit, wherein:

5 information to be acquired is selected by the
6 information screen unit from the information received by
7 the reception unit, and the screened information is
8 stored in the information storage unit.

1 Claim 47 (original): The device according to claim 46,
2 wherein
3 screening standards of the information screened by
4 the information screen unit designate a type of
5 information set by the setting unit, and only the
6 information of the type set by the setting unit is stored
7 in the information storage unit.

1 Claim 48 (original): The device according to claim 45,
2 wherein
3 the information relating to the type of
4 identification relates to at least one of a size of
5 information, a type of information, a style of
6 information, a file format of information, a content of
7 information, and a field of information.

1 Claim 49 (original): The device according to claim 45,
2 wherein
3 the information relating to a type of information
4 refers to information indicating a same target and a
5 different type of information size.

1 Claim 50 (original): The device according to claim 49,
2 wherein
3 the information relating to a type of information
4 includes information relating to at least one type of
5 common information, summary information obtained by

6 summarizing the common information, and address
7 information in a network containing information.

1 Claim 51 (original): The device according to claim 40,
2 further comprising:
3 a server address extraction unit extracting a server
4 address designating an information providing source
5 contained in the information acquired by the reception
6 unit; and
7 a second transmission unit transmitting a signal in
8 a style different from a style of the first transmission
9 unit.

1 Claim 52 (original): The device according to claim 51,
2 wherein
3 the second transmission unit transmits by wireless a
4 signal using an electromagnetic wave including light and
5 a sound wave including ultrasonic, and the signal
6 transmitted by wireless from the second transmission unit
7 has no directivity or has broader directivity than the
8 signal transmitted by the first transmission unit.

1 Claim 53 (original): The device according to claim 52,
2 wherein
3 when the information received by the reception unit
4 is address information in a network in which the
5 information exists, the second transmission unit
6 transmits an information request signal to the server
7 address extracted by the server address extraction unit.

1 Claim 54 (original): The device according to claim 52,
2 further comprising:

3 a selection unit selecting at least an information
4 item from the information presented by the information
5 presentation unit; and
6 an ID information addition unit adding information
7 ID designating information corresponding to the
8 information item selected by the selection unit to the
9 signal to be transmitted, wherein
10 the first transmission unit or the second
11 transmission unit transmits the signal to be transmitted.

1 Claim 55 (original): The device according to claim 40,
2 further comprising
3 a warning unit giving a warning when the information
4 acquired by the reception unit is incomplete or when it
5 is determined that information cannot be completely
6 acquired.

1 Claim 56 (original): The device according to claim 52,
2 wherein
3 the first transmission unit or the second
4 transmission unit retransmits the signal to be
5 transmitted when the information acquired by the
6 reception unit is incomplete or when it is determined
7 that information cannot be completely acquired.

1 Claim 57 (original): The device according to claim 55,
2 wherein
3 the warning unit gives a warning when a size of the
4 information acquired by the reception unit exceeds a
5 predetermined size or a free storage capacity of the
6 information storage unit.

1 Claim 58 (original): The device according to claim 55,
2 wherein
3 the warning unit gives a warning when the
4 information received and acquired by the reception unit
5 relates to a size of continually transmitted information,
6 and the size of the information exceeds a predetermined
7 size or a free storage capacity of the information
8 storage unit.

1 Claim 59 (original): The device according to claim 58,
2 wherein
3 when the size of the information acquired by the
4 reception unit exceeds a predetermined size or a free
5 storage capacity of the information storage unit, the
6 information is automatically changed to the information
7 relating to a type of information of a smaller size, the
8 information addition unit adds the information relating
9 to the type of information to the signal to be
10 transmitted, and the first transmission unit or the
11 second transmission unit retransmits the added signal to
12 be transmitted.

1 Claim 60 (original): The device according to claim 40,
2 further comprising
3 an information size setting unit setting a maximum
4 value of a size of information that can be received and
5 acquired by the reception unit, wherein
6 the information addition unit further adds
7 information relating to the maximum value of the size of
8 the information that can be acquired and is set by the
9 information size setting unit to the signal to be
10 transmitted.

1 Claim 61 (original): The device according to claim 60,
2 wherein
3 the information size setting unit automatically sets
4 the maximum value of the size of the information that can
5 be acquired into the free storage capacity of the
6 information storage unit.

1 Claim 62 (original): The device according to claim 40,
2 further comprising
3 a user information storage unit storing information
4 relating to a user of the information acquisition device,
5 wherein
6 the information addition unit further adds the
7 information relating to the user and stored in the user
8 information storage unit to the signal to be transmitted.

1 Claim 63 (original): The device according to claim 40,
2 further comprising
3 an equipment information storage unit storing
4 equipment information about the information acquisition
5 device, wherein
6 the information addition unit further adds the
7 equipment information stored in the equipment information
8 storage unit to the signal to be transmitted.

1 Claim 64 (original): The device according to claim 63,
2 wherein
3 the equipment information contains at least one or
4 more of a maker name of the information acquisition
5 device, a model number, a product serial number, and
6 version information about firmware.

1 Claim 65 (original): The device according to claim 40,
2 further comprising:
3 an information acquisition history storage unit
4 storing information designation information designating
5 the information received by the reception unit; and
6 an acquired information determination unit
7 determining whether or not information newly received by
8 the reception unit has been acquired before according to
9 the information designation information about the newly
10 received information, wherein
11 the information storage unit stores information
12 determined by the acquired information determination unit
13 that the information has not been acquired in the
14 information received by the reception unit.

1 Claim 66 (original): The device according to claim 30,
2 wherein
3 the information designation information stored in
4 the information acquisition history storage unit is
5 information containing either one of an address of a
6 device which transmits the signal received by the
7 reception unit or the information ID assigned to the
8 information received by the reception unit.

1 Claim 67 (original): The device according to claim 40,
2 further comprising
3 a detection unit detecting that there is an
4 information providing device capable of providing
5 information for the information acquisition device in the
6 direction of the directivity.

1 Claim 68 (original): The information acquisition device
2 according to claim 67, wherein
3 the detection unit further comprises:
4 an issued signal reception unit receiving an issued
5 signal from the information providing device; and
6 a notification unit notifying that there is the
7 information providing device detected when the issued
8 signal is received by the issued signal reception unit.

1 Claim 69 (original): The information acquisition device
2 according to claim 67, wherein
3 when the detection unit does not detect presence of
4 the information providing device, an information
5 acquiring operation is not performed.

1 Claim 70 (original): The device according to claim 67,
2 wherein
3 when the detection unit does not detect existence of
4 the information providing device, and when the mode
5 setting unit sets a mode of acquiring both information
6 and an image, an image is captured only as in the mode of
7 acquiring only an image.

1 Claim 71 (original): The device according to claim 40,
2 further comprising
3 a program update unit extracting a control program,
4 and updating all or a part of the control program stored
5 in the program memory to be updated based on the control
6 program when the control program of the information
7 acquisition device is contained in the signal received by
8 the reception unit.

1 Claim 72 (original): The device according to claim 71,
2 further comprising:
3 an unreasonable program check unit detecting whether
4 or not an unreasonable program is contained in the
5 information acquired by the reception unit;
6 an unreasonable program warning unit giving a
7 warning when it is detected by the unreasonable program
8 check unit that an unreasonable program is contained in
9 the information acquired by the reception unit; and
10 an unreasonable program deletion unit deleting
11 acquired information when it is detected by the
12 unreasonable program check unit that an unreasonable
13 program is contained in the information acquired by the
14 reception unit.

1 Claim 73 (original): The device according to claim 40,
2 further comprising
3 an encryption unit encrypting all or a part of the
4 information added by the information addition unit to the
5 signal to be transmitted using an encryption key
6 contained in the information received and acquired by the
7 reception unit.

1 Claim 74 (original): The device according to claim 73,
2 wherein
3 the information addition unit further adds the
4 encryption key request information to the signal to be
5 transmitted.

1 Claim 75 (original): The device according to claim 40,
2 further comprising:

3 an encryption key generation unit generating an
4 encryption key and a decryption key; and
5 a decryption unit decrypting encrypted information
6 contained in the signal received by the reception unit
7 using the decryption key, wherein
8 the information addition unit adds an encryption key
9 generated by the encryption key information generation
10 unit to the signal to be transmitted.

1 Claim 76 (original): The device according to claim 40,
2 wherein
3 the reception unit further comprises a communication unit
4 using a public network and receiving, regenerating, and
5 communicating common voice through the public network.

1 Claim 77 (original): An information providing device
2 capable of providing information at an information
3 request from the information acquisition device according
4 to at least one of claims 1 through 76, comprising:
5 an information database storing information to be
6 provided;
7 a first information reception unit receiving a
8 request signal transmitted by wireless from the first
9 transmission unit having the directivity of the
10 information acquisition device;
11 a request extraction unit extracting a destination
12 address for designation of a destination of information
13 from the request signal received by the first information
14 reception unit; and
15 a first information transmission unit transmitting
16 by wireless the information to be provided read at the
17 request signal from the information database to a

18 destination address according to the address information
19 extracted by the request extraction unit.

1 Claim 78 (original): The device according to claim 77,
2 wherein

3 the destination address extracted by the request
4 extraction unit is an own address as an address of a
5 reception unit of the information acquisition device
6 receiving the provided information , and the first
7 information transmission unit transmits by wireless the
8 information to be provided read from the information
9 database at the request signal to the own address.

1 Claim 79 (original): The device according to claim 78,
2 further comprising

3 a second information reception unit receiving the
4 signal transmitted by wireless from the second
5 transmission unit of the information acquisition device
6 in addition to the first information reception unit,
7 wherein
8 the first information transmission unit transmits
9 the address of second information reception unit to the
10 destination address extracted by the request extraction
11 unit.

1 Claim 80 (original): The device according to claim 78,
2 further comprising

3 an ID information extraction unit extracting an
4 information ID designating information from the request
5 signal received by the first information reception unit
6 or the second information reception unit, wherein

7 when the ID information extraction unit extracts the
8 information ID from the request signal, the first
9 information transmission unit transmits by wireless the
10 information corresponding to the information ID stored in
11 the information database, and when the ID information
12 extraction unit does not extract the information ID from
13 the request signal received by the first information
14 reception unit, the first information transmission unit
15 transmits by wireless predetermined information stored in
16 the information database.

1 Claim 81 (original): The device according to claim 80,
2 wherein

3 when the information ID is not extracted from the
4 request signal received by the first information
5 reception unit, the first information transmission unit
6 transmits by wireless index information about information
7 which can be provided and stored in the information
8 database.

1 Claim 82 (original): The device according to claim 77,
2 further comprising

3 an information type extraction unit extracting the
4 information relating to the type of the requested
5 information from the request signal received by the first
6 information reception unit, wherein
7 the first information transmission unit transmits by
8 wireless the information read from the information
9 database according to the information relating to the
10 type of information extracted by the information type
11 extraction unit.

1 Claim 83 (original): The device according to claim 77,
2 further comprising
3 an encryption unit encrypting the information to be
4 transmitted by the first information transmission unit.

1 Claim 84 (original): The device according to claim 77,
2 further comprising
3 a signal transmission unit transmitting by wireless
4 a signal for notification that information can be
5 provided.

1 Claim 85 (original): The device according to claim 77,
2 wherein:
3 the first information reception unit comprises a
4 plurality of reception units and an information selection
5 unit selecting provided information corresponding to each
6 reception unit; and
7 the first information transmission unit transmits
8 the information stored in the information database
9 selected by the information selection unit.

1 Claim 86 (original): The device according to claim 78,
2 further comprising:
3 an equipment information extraction unit extracting
4 equipment information about the information acquisition
5 device from the request signal received by the first
6 information reception unit; and
7 a program information database storing a control
8 program controlling and operating a device, wherein
9 the first information transmission unit transmits a
10 control program corresponding to the equipment
11 information stored in the program information database

12 according to the equipment information extracted from the
13 request signal.

1 Claim 87 (original): The device according to claim 77,
2 wherein
3 the request extraction unit further extracts user
4 information from a signal received by the first
5 information reception unit, and the first information
6 transmission unit transmits the information to be
7 provided read corresponding to the user information from
8 the information database to the address extracted by the
9 request extraction unit.

1 Claim 88 (original): The device according to claim 87,
2 further comprising:
3 a user information determination unit determining a
4 level of the user information from the user information
5 extracted by the request extraction unit; and
6 a user information database storing the user
7 information extracted by the request extraction unit,
8 wherein
9 the information being transmitted by the first
10 information transmission unit to the destination address
11 extracted by the request extraction unit is read from the
12 information database corresponding to the level of the
13 user information determined by the user information
14 determination unit.

1 Claim 89 (original): The device according to claim 78,
2 further comprising:
3 an encryption key information generation unit
4 generating an encryption key and a decryption key; and

5 a decryption unit decrypting encrypted information
6 contained in the signal received by the first information
7 reception unit or the second information reception unit
8 by the decryption key, wherein
9 the first information transmission unit transmits an
10 encryption key generated by the encryption key
11 information generation unit to the destination address
12 according to an address information extracted by the
13 request extraction unit.

1 Claim 90 (original): The device according to claim 77,
2 further comprising:
3 an information providing history database storing a
4 destination address when the first information
5 transmission unit transmits information to be provided to
6 the destination address; and
7 a determination unit determining whether or not a
8 destination address extracted by the request extraction
9 unit has been stored in the information providing history
10 database before, wherein
11 the first information transmission unit transmits or
12 does not transmit predetermined information read from the
13 information database to a destination address extracted
14 from the request extraction unit depending on a
15 determination result by the determination unit.

1 Claim 91 (original): The device according to claim 77,
2 wherein:
3 the destination address to which the first
4 information transmission unit transmits information to be
5 provided and ID information about the information to be
6 provided for designation of the information to be

7 provided are associated and stored in the information
8 providing history database;
9 the determination unit determines whether or not the
10 destination address extracted by the request extraction
11 unit and the ID information about the information to be
12 provided read from the information database are
13 associated with and stored in the information providing
14 history database, and
15 the first information transmission unit transmits or
16 does not transmit request information read from the
17 information database to a destination address extracted
18 from the request extraction unit depending on a
19 determination result by the determination unit.

1 Claim 92 (original): The device according to 77, further
2 comprising
3 a second information transmission unit different
4 from the first information transmission unit, wherein:
5 the request extraction unit extracts an own address
6 from the signal received by the first information
7 reception unit and a second address different from the
8 own address;
9 the second information transmission unit transmits
10 the information to be provided read from the information
11 database and the information extracted from the request
12 extraction unit using the second address as a destination
13 address; and
14 the first information transmission unit transmits,
15 to the own address, transmission result information
16 notifying that the information to be provided has been
17 transmitted to the destination address of the information
18 extracted by the request extraction unit.

1 Claim 93 (original): The device according to 92, wherein
2 when a destination address designating a destination
3 of information different from the own address is not
4 contained in the signal received by the first information
5 reception unit, the first information transmission unit
6 transmits the information to be provided to the own
7 address extracted by the request extraction unit.

1 Claim 94 (original): The device according to claim 77,
2 further comprising:
3 a third information transmission unit different from
4 the first information transmission unit; and
5 a third information reception unit receiving a
6 returned signal in response to a signal transmitted by
7 the third information transmission unit, wherein
8 the request extraction unit extracts request
9 information contained in the signal received by the first
10 information reception unit;
11 the third information transmission unit transmits a
12 second request signal containing the information request
13 to a predetermined address;
14 the third information reception unit receives a
15 returned signal in response to the second request signal;
16 and
17 the first information transmission unit transmits
18 the information contained in the returned signal received
19 by the third information reception unit to the
20 destination address.

1 Claim 95 (original): The device according to claim 94,
2 wherein

3 the request extraction unit further extracts
4 information relating to a type of information from the
5 signal received by the first information reception unit;
6 the third information transmission unit transmits a
7 information request signal containing the information
8 relating to the type of information to a second
9 information providing device capable of providing
10 information corresponding to the information relating to
11 the type of information when the information
12 corresponding to the information relating to the type of
13 information extracted by the request extraction unit is
14 not stored in the information database; and
15 when the information corresponding to the
16 information relating to the type of information
17 transmitted by the second information providing device is
18 received by the third information reception unit, the
19 first information transmission unit transmits the
20 information corresponding to the information relating to
21 the type of information to the destination address
22 extracted by the request extraction unit.

1 Claim 96 (original): The device according to claim 94,
2 wherein:

3 the request extraction unit further extracts the
4 equipment information about a source of the signal
5 received by the first information reception unit;
6 when the information corresponding to the equipment
7 information extracted by the request extraction unit is
8 stored in the information database, the third information
9 transmission unit transmits the information read from the
10 information database corresponding to the equipment
11 information and predetermined information read from the

12 information database to the destination address extracted
13 by the request extraction unit; or
14 when the information corresponding to the equipment
15 information extracted by the request extraction unit is
16 not stored in the information database, the third
17 information transmission unit transmits the information
18 request signal containing the equipment information to
19 the second information providing device capable of
20 providing the information corresponding to the equipment
21 information; and
22 when the information corresponding to the equipment
23 information transmitted by the second information
24 providing device is received by the third information
25 reception unit, the first information transmission unit
26 transmits the information corresponding to the equipment
27 information and the predetermined information read from
28 the information database to the destination address
29 extracted by the request extraction unit.

1 Claim 97 (original): The device according to claim 95,
2 further comprising
3 a device designation unit designating a second
4 information providing device capable of providing
5 information corresponding to the information relating to
6 the type of information, wherein
7 the third information transmission unit transmits
8 the information relating to the type of information to
9 the second information providing device designated by the
10 device designation unit.

1 Claim 98 (original): The device according to claim 96,
2 further comprising

3 a device designation unit designating a second
4 information providing device capable of providing
5 information corresponding to the equipment information,
6 wherein
7 the third information transmission unit transmits
8 the equipment information to the second information
9 providing device designated by the device designation
10 unit.

1 Claim 99 (original): The device according to claim 98,
2 wherein
3 the distribution contains at least one or more of a
4 maker name of the information acquisition device, a model
5 number, a product serial number, and version information
6 about firmware.

1 Claim 100 (original): The device according to claim 77,
2 further comprising
3 an information processing unit modifying the information
4 transmitted by the first information transmission unit.

1 Claim 101 (original): The device according to claim 100,
2 wherein
3 the information modifying unit compresses or
4 encrypts information.

Claims 102-134 (canceled)

1 Claim 135 (original): An information providing method in
2 an information providing system having an information
3 acquisition device which acquires digital information and
4 an information providing device capable of providing

5 information at an information request from the
6 information acquisition device, wherein:
7 the information acquisition device performs:
8 adding to an information request signal at least an
9 address specifying a destination of information;
10 transmitting by wireless the added information request
11 signal as a signal having directivity in a directivity
12 direction;
13 the information providing device performs:
14 receiving an information request signal transmitted by
15 wireless in the directivity direction;
16 extracting the address from the received information
17 request signal; and
18 transmitting by wireless information read at the
19 information request signal from an information database
20 storing information to be provided to the extracted
21 address.

1 Claim 136 (original): The method according to claim 135,
2 wherein:
3 the destination address is an address of the
4 information acquisition device; and
5 a signal including the information transmitted by
6 wireless from the information providing device has no
7 directivity, or is transmitted as a signal having
8 broader directivity than the information request signal.

1 Claim 137 (original): The method according to claim 135,
2 wherein:
3 the information acquisition device performs;
4 adding user information about the information acquisition
5 device to the information request signal; and

6 the information providing device performs:
7 further extracting the user information from the received
8 information request signal; and
9 transmitting by wireless the information read according
10 to the user information extracted from the information
11 database to the extracted address.

1 Claim 138 (original): The method according to claim 136,
2 wherein
3 the information acquisition device performs
4 retransmitting by wireless the added information request
5 signal in the directivity direction when the received
6 information is incomplete, or when it is determined that
7 information cannot be completely acquired.

1 Claim 139 (original): The method according to claim 136,
2 wherein
3 the information acquisition device performs
4 giving a warning when the received information
5 is incomplete, or when it is determined that information
6 cannot be completely acquired.

1 Claim 140 (original): The method according to claim 136,
2 wherein:
3 the information acquisition device performs
4 further adding equipment information about the
5 information acquisition device to the information request
6 signal;
7 The information providing device performs:
8 further extracting the equipment information from the
9 received information request signal; and

10 further transmitting by wireless a control program
11 corresponding to the equipment information stored in a
12 program information database to the extracted address of
13 the information acquisition device according to the
14 extracted equipment information; and
15 the information acquisition device performs:
16 further receiving the control program
17 transmitted by wireless; and
18 updating all or a part of the control program for control
19 of an operation of the information acquisition device
20 stored in program memory based on the received control
21 program.

1 Claim 141 (original): The method according to claim 135,
2 wherein
3 the information providing device performs
4 transmitting by wireless a signal notifying that
5 information can be provided when the information can be
6 provided; and
7 the information acquisition device performs
8 acquiring information when a signal notifying that the
9 information can be provided can be detected in the
10 directivity direction.

1 Claim 142 (original): The method according to claim 141,
2 wherein
3 the information acquisition device performs
4 acquiring no information when a signal notifying that the
5 information can be provided cannot be detected in the
6 directivity direction.

1 Claim 143 (original): The method according to claim 135,
2 wherein
3 the information acquisition device perform
4 capturing a subject image in a same direction
5 as the directivity direction and acquiring image data in
6 addition to an information acquiring operation after an
7 instruction to acquire information is issued, and storing
8 the acquired image data in addition to the received
9 information.

1 Claim 144 (original): The method according to claim 143,
2 wherein
3 the information acquisition device performs
4 setting at least one of or switching settings
5 of: a mode of acquiring only information; a mode of
6 acquiring only an image; and a mode of acquiring both
7 information and an image, and performing an operation
8 depending on the set or switched mode.

1 Claim 145 (original): The method according to claim 135,
2 wherein:
3 the information acquisition device performs
4 setting information relating to a type of
5 received information;
6 further adding information relating to a type of the set
7 information to the information request signal; and
8 the information providing device performs:
9 further extracting the information relating to the type
10 of information from the received information request
11 signal; and
12 transmitting by wireless the information read according
13 to the information relating to the type of information

14 extracted from the information database to the extracted
15 address.

1 Claim 146 (original): The method according to claim 136,
2 wherein:
3 the information acquisition device performs:
4 setting information relating to a type of received
5 information; and
6 further adding information relating to the type of the
7 received information; and
8 the information providing device performs:
9 further extracting the information relating to the type
10 of information from the received information request
11 signal; and
12 transmitting by wireless the information read according
13 to the information relating to the type of information
14 extracted from information database to the address of the
15 information terminal device; and
16 the information acquisition device performs
17 giving a warning when a size of the received information
18 exceeds a predetermined size or a free storage capacity
19 of the information storage unit.

1 Claim 147 (original): The method according to claim 136,
2 wherein:
3 the information acquisition device performs:
4 setting information relating to a type of received
5 information; and
6 further adding information relating to the type of the
7 received information; and
8 the information providing device performs:

9 further extracting the information relating to the type
10 of information from the received information request
11 signal; and
12 transmitting by wireless the information read according
13 to the information relating to the type of information
14 extracted from information database to the address of the
15 information terminal device; and
16 the information acquisition device performs
17 automatically changing information relating to a type of
18 information having small information size, and
19 transmitting by wireless an information request signal to
20 which the information relating to the type of the changed
21 information and an address of the information acquisition
22 device is added in the directivity direction when a size
23 of the received information exceeds a predetermined size
24 or a free storage capacity of the information storage
25 unit.

1 Claim 148 (original): The method according to claim 136,
2 wherein:
3 the information acquisition device performs:
4 presenting all or a part of stored information or the
5 received information;
6 selecting at least one information item from the
7 presented information;
8 further adding information ID designating information
9 corresponding to the selected information item to the
10 information request signal; and
11 the information providing device performs:
12 transmitting by wireless the information read according
13 to the information ID from the information database to
14 the extracted address of the information terminal device

15 when the information ID designating the information can
16 be further extracted from the received information
17 request signal;
18 transmitting by wireless predetermined information stored
19 in the information database to the extracted address of
20 the information terminal device when the information ID
21 designating the information cannot be extracted from the
22 received information request signal.

1 Claim 149 (original): The method according to claim 143,
2 wherein
3 the information acquisition device performs
4 externally transmitting stored information or image data,
5 or the received information.

1 Claim 150 (original): The method according to claim 143,
2 wherein
3 the information acquisition device performs
4 transmitting stored information or image data, or the
5 received information to a predetermined destination
6 address.

1 Claim 151 (original): The method according to claim 136,
2 wherein:
3 the information acquisition device performs:
4 generating an encryption key and a decryption
5 key; and
6 further adding the generated encryption key to the
7 information request signal;
8 the information providing device performs:
9 further extracting the encryption key from the received
10 information request signal;

11 encrypting the information read according to the
12 information request signal from the information database
13 using the extracted encryption key; and
14 transmitting by wireless the encrypted information to the
15 extracted address of the information terminal device; and
16 the information acquisition device performs:
17 decrypting the received information using the generated
18 decryption key; and
19 storing the decrypted information.

1 Claim 152 (original): The method according to claim 136,
2 wherein:
3 the information providing device performs
4 transmitting by wireless the information read according
5 to the request signal from the information database and
6 the information designation information for designating
7 the information to the extracted address of the
8 information acquisition device; and
9 the information acquisition device performs:
10 receiving the information transmitted by wireless and the
11 information designation information for designating the
12 information;
13 determining whether or not the received information has
14 already been acquired according to the information
15 designation information for designating the received
16 information and stored information designation
17 information, and storing the received information when it
18 is determined that the information has not been acquired;
19 and
20 storing the information designation information
21 designating the received information.

1 Claim 153 (original): The method according to claim 136,
2 wherein:
3 the information providing device performs:
4 generating an encryption key and a decryption
5 key; and
6 transmitting by wireless the generated encryption key to
7 the extracted address of the information terminal device;
8 the information acquisition device performs:
9 receiving the encryption key transmitted by
10 wireless;
11 encrypting user information of the information
12 acquisition device using the received encryption key; and
13 further adding the encrypted user information to the
14 information request signal; and
15 the information providing device performs:
16 further extracting the encrypted user information from
17 the received information request signal;
18 decrypting the extracted user information using the
19 generated decryption key; and
20 transmitting by wireless the information read according
21 to the decrypted user information from the information
22 database to the extracted address of the information
23 terminal device.

1 Claim 154 (original): The method according to claim 136,
2 wherein:
3 the information providing device performs
4 transmitting by wireless predetermined information stored
5 in the information database and the address of the
6 information providing device to the extracted address of
7 the information terminal device from the information
8 request signal when the information request signal

9 transmitted by wireless in the directivity direction is
10 received;
11 the information acquisition device performs:
12 receiving the information transmitted by wireless and the
13 address of the information providing device;
14 presenting all or a part of stored information of the
15 received information on a display unit of the information
16 acquisition device;
17 selecting at least one information item from the
18 presented information; and
19 transmitting by wireless an information request signal to
20 which an information ID designating information
21 corresponding to the selected information item and the
22 address of the information acquisition device are added
23 to the received address of the information providing
24 device; and
25 the information providing device performs:
26 receiving an information request signal transmitted by
27 wireless to the address of the information providing
28 device;
29 extracting the information ID and the address of the
30 information acquisition device from the received
31 information request signal; and
32 transmitting by wireless the information read
33 corresponding to the extracted information ID from the
34 information database to the extracted address of the
35 information terminal device.

Claims 155-265 (canceled)